

Summary of observed and estimated PCB 106&118 concentrations in sediment and fish tissue by scenario. [Updated by KT on 1-22-08]

| Scenario | Description | CONCENTRATION ($\mu\text{g kg}^{-1}$) ^(a) | |
|----------|--|--|---|
| | | SEDIMENT (mean) ^(b) | FISH TISSUE (mean) ^(b) |
| 1 | Upstream load (given $\text{CWT}_{\text{up}} = 0.014 \text{ ng L}^{-1}$), no stormwater load, no sediment contamination (CST = 0) | $3.5 \times 10^{-6} \pm 1.3 \times 10^{-6}$ 8.7×10^{-9} (Lagoon) | 5.3 ± 0.9 0.1 (Lagoon) |
| 2 | Upstream load, stormwater load ^(c) , no sediment contamination (CST = 0) | $4.6 \times 10^{-6} \pm 2.9 \times 10^{-6}$ 6.5×10^{-7} (Lagoon) | 6.1 ± 2.2 5.3 (Lagoon) |
| 3 | Upstream load, stormwater load ^(c) , initial sediment contamination at the SLV (CST = SLV) ^(e) | 0.1 ± 0.002 0.1 (Lagoon) | 6.3 ± 2.2 5.4 (Lagoon) |
| 4 | Upstream load, no stormwater load, initial sediment contamination at harbor average less "hot spots" (CST = $2.86 \mu\text{g kg}^{-1}$) ^(d) | 2.8 ± 0.1 2.8 (Lagoon) | 9.7 ± 1.0 4.6 (Lagoon) |
| 5 | Upstream load, stormwater load ^(c) , initial sediment contamination at harbor average less "hot spots" (CST = $2.86 \mu\text{g kg}^{-1}$) ^(d) | 2.8 ± 0.1 2.8 (Lagoon) | 10.5 ± 2.2 9.8 (Lagoon) |
| 6 | Upstream load, no stormwater load, sediment contamination at presently observed levels | 22.4 ± 81.1 <i>16.7 ± 44.5</i> 8.4 (Lagoon) 8.8 | 40.4 ± 128.0 <i>31.2 ± 14.9</i> 13.5 (Lagoon) <i>22.9 ± 14.2</i> |
| 7 | Upstream load, stormwater load ^(c) , sediment contamination at presently observed levels | 22.4 ± 81.1 <i>16.7 ± 44.5</i> 8.4 (Lagoon) 8.8 | 41.5 ± 130.4 <i>31.2 ± 14.9</i> 18.7 (Lagoon) <i>22.9 ± 14.2</i> |
| | Public health protection levels | SLV = 0.12 ^(e) | FCAV = 5.9 ^(f) ATL = 2.1 ^(g) |

^(a) Observed sediment and fish tissue concentrations are shown in italics.

^(b) Mean (± 1 standard deviation) of estimated concentrations between days 2000-3000 (near steady-state) of the model simulation.

^(c) Karen and Dawn developed stormwater loading rates for land uses and unique sites using LWG data available as of 9/07* and then calculated segment loading rates by applying those rates to the upland area draining to each segment. (*Because the LWG data only included PCB 106&118, these values were treated as if they were PCB 118.)

^(d) In an attempt to represent what the average sediment concentration would be if "hot spots" were cleaned up, the initial total concentration in sediment was derived by averaging the 90th percentile of the entire PCB 118 sediment data set from the area of the harbor included in the model.

^(e) SLV = Screening level value for sediment for PCB-118, cancer basis (ODEQ 2007).

^(f) FCAV = Fish consumption advisory value for general human consumption, total PCBs, non-cancer basis (USEPA 2000). Cancer-based FCAV is $1.5 \mu\text{g kg}^{-1}$.

^(g) ATL = Acceptable tissue level for general human consumption, total PCBs, cancer basis (ODEQ 2007).